REMARKS

These amendments are made solely to correct the description of the figures to correspond with the formal drawings being filed herewith. No new matter is introduced.

Attached is a marked-up version of the changes being made by the current amendment.

Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

In the specification:

Paragraph beginning at page 17, line 13, has been amended as follows:

Figures 1A-1B depict[s] the cDNA sequence (SEQ ID NO:1) and predicted amino acid sequence (SEQ ID NO:2) of murine LIG46.

Paragraph beginning at page 17, line 15, has been amended as follows:

Figures 2A-2C depict[s] a series of alignments of the amino acid sequence of LIG46 with portions of a number of galactosyltransferases, including (from top to bottom): *Mus musculus* UDP-Gal: betaGlcNAc beta 1,3-galactosyltransferase-I (Accession Number AF029790; SEQ ID NO:___); *Mus musculus* IPP-Gal: betaGlcNAc beta 1,3-galactosyltransferase-III (Accession Number AF029792); *Drosophila melanogaster* neurogenic secreted signalling protein ("Brainiac"; Accession Number U41449; SEQ ID NO:___); and *Homo sapiens* UDP-galactose: 2-acetamido-2-deoxy-D-glucose3beta-galactosyltransferase (Accession Number Y15014; SEQ ID NO:____). The amino acid sequence above the solid line is a majority sequence.

Paragraph beginning at page 18, line 4, has been amended as follows:

Figures 4A-4B depict[s] the cDNA sequence (SEQ ID NO:5) and predicted amino acid sequence (SEQ ID NO:6) of murine LIG56.

Paragraph beginning at page 18, line 12, has been amended as follows:

Figures 7A-7B depict[s] the cDNA sequence of human LIG46.

Paragraph beginning at page 18, line 15, has been amended as follows:

Figures 9A-9B depict[s] an alignment of the cDNA sequences of human LIG46 (upper sequence) and murine LIG46 (lower sequence).

Paragraph beginning at page 18, line 31, has been amended as follows:

A nucleotide sequence encoding murine LIG46 protein is shown in Figures 1A-1B (SEQ ID NO:1; SEQ ID NO:3 includes the open reading frame only). A predicted amino acid sequence of LIG46 protein is also shown in Figures 1A-1B (SEQ ID NO: 2).

Paragraph beginning at page 19, line 4, has been amended as follows:

The murine LIG46 cDNA of Figures 1A-1B (SEQ ID NO:1) encodes a 397 amino acid protein.

Paragraph beginning at page 19, line 20 has been amended as follows:

A nucleotide sequence encoding murine LIG56 protein is shown in Figures 4A-4B (SEQ ID NO:5; SEQ ID NO:7 includes the open reading frame only). A predicted amino acid sequence of LIG46 protein is also shown in Figures 4A-4B (SEQ ID NO:6).

Paragraph beginning at page 19, line 24, has been amended as follows:

The murine LIG56 cDNA of Figures 4A-4B (SEQ ID NO:5) encodes a 400 amino acid protein.

Paragraph beginning at page 94, line 18, has been amended as follows:

Portions of LIG46 are similar to certain galactosyltransferases. Figures 2A-2C depict[s] a series of alignments of portions of the amino acid sequence of LIG46 with portions of a number of galactosyltransferases, including: *Mus musculus* UDP-Gal: betaGlcNAc beta 1,3-galactosyltransferase-I (Accession Number AF029790; SEQ ID NO:___); *Mus musculus* IPP-Gal: betaGlcNAc beta 1,3-galactosyltransferase-III (Accession Number AF029792); *Drosophila melanogaster* neurogenic secreted signalling protein (Accession Number U41449; SEQ ID NO:___); and *Homo sapiens* UDP-galactose: 2-acetamido-2-deoxy-D-glucose3beta-galactosyltransferase (Accession Number Y15014; SEQ ID NO:____). A majority sequence is depicted above the solid line. Conserved residues are shaded. These residues are more likely conserved in functional variants of LIG46.

Paragraph beginning at page 95, line 5, has been amended as follows:

Figures 7A-7B depict[s] the cDNA sequence of a full-length human LIG46 clone. Figure 8 depicts the predicted amino acid sequence of human LIG46. The human LIG46 cDNA depicted in Figure 7 (SEQ ID NO:__) has a 1191 nucleotide open reading frame which encodes a 397 amino acid protein (SEQ ID NO:__). This protein includes a predicted signal sequence of about 32 amino acids (from amino acid 1 to about amino acid 32 of SEQ ID NO:__) and a predicted mature protein of about 365 amino acids (from about amino acid 33 to amino acid 397 of SEQ ID NO:__; SEQ ID NO:__). Figures 9A-9B depict[s] an alignment of the cDNA

sequences of human LIG46 (upper sequence) and murine LIG46 (lower sequence). Figure 10 depicts an alignment of the predicted amino acid sequences of human LIG46 (upper sequence) and murine LIG46 (lower sequence).

Paragraph beginning at page 100, line 15, has been amended as follows:

The full-length LIG56 cDNA isolated as described above (SEQ ID NO:5) is shown in Figures 4A-4B. This cDNA has a 1200 nucleotide open reading frame (nucleotides 1 - 1200 of SEQ ID NO:5; SEQ ID NO:7) which encodes a 400 amino acid protein (SEQ ID NO:6).